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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/677,075	09/30/2003	Takeshi Konno	.TOW-045RCE2	8343

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EXAMINER	
NGUYEN, NAM V	
ART UNIT	**PAPER NUMBER**
2612	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/677,075	KONNO, TAKESHI	
	Examiner	Art Unit	
	Nam V. Nguyen	2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 August 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-6* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *9/28/07*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This communication is in response to applicant's Amendment which is filed August 30, 2007 by a request for continued examination.

An amendment to the claim 1 has been entered and made of record in the application of Konno for an "electronic key system for vehicle" filed September 30, 2003.

Claims 1-6 are pending.

Response to Arguments

Applicant's arguments with respect to claims 1-6, filed August 30, 2007, have been fully considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Isoda et al. (US# 6,515,580) in view of Kulha et al. (US# 5,973,611).

Isoda et al. disclose an electronic key system for a motorcycle (see Figures 1 to 4), comprising an antitheft unit (22) mounted on the motorcycle (see Figure 4) and an owner identification device for transmitting a signal to said antitheft unit (22) through an antenna (23) (column 1 lines 44 to 51; see Figure 1-3),

wherein said transmitting antenna (23) is installed on an instrument panel (21 and 24) of said motorcycle (column 1 lines 45 to 56; see Figure 4); wherein said transmitting antenna (23) is installed near the center of rotation of said handle bar assembly (15), wherein said instrument panel (21 and 24) is disposed around a handle bar assembly (15) near the center of rotation of said handle bar assembly (15), and wherein the instrument panel (21 and 24) turns as said handle bar assembly turn (column 1 lines 45 to 56; column 4 lines 26 to 34; see Figure 4).

However, Isoda et al. did not explicitly disclose the electronic key for transmitting a response signal in response to receiving a request signal and wherein said transmitting antenna has a first range of transmission, said electronic key has a second range of transmission, and said first range of transmission is smaller then said second range of transmission.

In the same field of endeavor of antitheft unit of a vehicles, Kulha et al. teach that the FOB transceiver (12) (i.e. electronic key) for transmitting a response identification signal (i.e. a response signal) in response to receiving a wake-up/data signal (i.e. a request signal) (column 5 lines 57 to 67; see Figure 1 and 8A) and wherein said a transmitter of wake-up and data (24) (i.e. transmitting antenna) has a first zone (58) (i.e. first range of transmission), said FOB transceiver

(12) (i.e. electronic key) has a second zone (56) (i.e. a second range of transmission), and said the first zone (58) (i.e. first range of transmission) is smaller then said second zone (56) (i.e. a second range of transmission) (column 4 lines 12 to 32; see Figure 2) in order to increase battery life in the key fob and also to avoid an intruder enter through another door.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to recognize transmitting the response identification signal in response to receiving the request data signal and the range of transmission of the key fob is greater than the range of transmission of the vehicle taught by Kulha et al in the operation of the remote control transponder carried on the key of Isoda al. because the key fob for transmitting the response identification code signal in response to receiving of the wake-up or data signal would improve operation and increase security of the antitheft control unit of a motorcycle.

Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Isoda et al. (US# 6,515,580) in view of Kulha et al. (US# 5,973,611) as applied to claim 1 above, and in view of Yamamoto (US# 6,078,293).

Referring to claims 2-3, Isoda et al. in view of Kulha et al. disclose an electronic key system for a vehicle according to claim 1, however, Isoda et al. in view of Kulha et al. did not explicitly disclose wherein said instrument panel has one or more instruments and a board for securing said instruments thereto, and wherein said transmitting antenna is provided on said board.

In the same field of endeavor of remote keyless entry system, Yamamoto teaches that wherein said instrument panel (1) (i.e. column switch) has one or more instruments (1D to 1E) (i.e. levers) and a board (1C) (i.e. a main body) for securing said instruments (1D to 1E) thereto, and wherein said transmitting antenna (1C) is provided on said board (1C) (column 2 lines 26 to 65; column 3 lines 9 to 44; see Figures 1 to 3) in order to obtain the best transmission strategy for transmitting and receiving signals from a remote keyless entry apparatus.

One of ordinary skilled in the art recognizes the need to put an antenna in a column switch within the switch main body for a keyless entry system of Yamamoto in an operation switch panel of a motorcycle of Isoda et al. in view of Kulha et al. because Isoda et al. suggest it is desired to place an antenna in an appropriate position of a vehicle body to transmit signal (column 1 lines 50 to 56; see Figure 1) and Yamamoto teaches that an antenna of a transceiver unit is mounted on a printed circuit board of a switch main body to receive signals from a an keyless entry apparatus (column 2 lines 44 to 65; column 3 lines 9 to 18) in order to improve the signal receiving sensitivity. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to put an antenna in a column switch within the switch main body for a keyless entry system of Yamamoto in an operation switch panel of a motorcycle of Isoda et al. in view of Kulha et al. with the motivation for doing so would have been to provide a reliable transmitting and receiving signals in the antitheft device for a motorcycle.

Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Isoda et al. (US# 6,515,580) in view of Kulha et al. (US# 5,973,611) as applied to claim 1 above, and in view of Caldwell (US# 4,132,994).

Referring to claims 4-6, Isoda et al. in view of Kulha et al. disclose an electronic key system for a vehicle according to claim 1, however, Isoda et al. in view of Kulha et al. did not explicitly disclose further comprising a shade mounted around said instrument panel, and wherein said transmitting antenna is installed on said shade; characterized in that said shade is made of a resin, and characterized in that said transmitting antenna is installed on an inner wall surface of said shade.

In the same field of endeavor of radio antenna for motorcycle system, Caldwell teaches that a shade (18) (i.e. a transparent windshield) mounted around said instrument panel (column 3 line 64 to column 3 line 5), and wherein said transmitting antenna (44) (i.e. an elongated antenna element) is installed on said shade (18) (column 3 line 52 to column 4 line 20); characterized in that said shade is made of a resin (i.e. non-conducting or glass windshield), and characterized in that said transmitting antenna (44) is installed on an inner wall surface of said shade (18) (column 2 line 64 to column 4 line 35; see Figures 1 to 5) in order to avoid damage.

One of ordinary skilled in the art recognizes the need to install an antenna on a windshield of Caldwell in a remote control unit of a motorcycle of Isoda et al. in view of Kulha et al. because Isoda et al. suggest it is desired to place an antenna in an appropriate position of a vehicle body to transmit signal (column 1 lines 50 to 56; see Figure 1) and Caldwell teaches that an antenna is mounted on a transparent windshield of a motorcycle (column 2 line 64 to column

4 line 35) in order to avoid damage to the antenna. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to install an antenna on a windshield of Caldwell in a remote control unit of a motorcycle of Isoda et al. in view of Kulha et al. with the motivation for doing so would have been to provide a reliable transmitting and receiving signals in a remote keyless entry system.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Fujii et al. (US# 5,379,033) disclose a remote control device.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nam V Nguyen whose telephone number is 571-272-3061. The examiner can normally be reached on Mon-Fri, 8:30AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's acting supervisor, Brian Zimmerman can be reached on 571- 272-3059. The fax phone numbers for the organization where this application or proceeding is assigned are 571-273-8300 for regular communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nam Nguyen
November 9, 2007

BRIAN ZIMMERMAN
SUPERVISORY PATENT EXAMINER